COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This Air National Guard Manpower Standard (ANGMS) quantifies the manpower required to accomplish the tasks described in the process oriented description (POD) for varying levels of workload in the 204th Security Forces Squadron, Ft Bliss, TX. This ANGMS applies to the 204th Security Forces Squadron, Computer/Local Area Network (LAN) Maintenance mission only. This standard applies to peacetime operations only. The Air National Guard (ANG) is the authority for the approval and publication of ANG Manpower Standards. Air Force (AF) and ANG directives contain policy and procedural guidance for the operation of the Security Forces function. This standard was developed in accordance with AF Instruction (AFI) 38-201, *Determining Manpower Requirements,* and AF Manual (AFMAN) 38-208, Volume 1, *Air Force Management Engineering Program (MEP) - Processes*, and AFMAN 38-208, Volume 2, *Air Force Management Engineering Program (MEP) - Quantification Tools.* Send comments and suggested improvements on AF IMT 847, *Recommendation for Change of Publication*, through channels, to ANG, Management Engineering Branch (ANG/XPME/Operating Location TN [OLTN]), 106 Briscoe Drive, McGhee Tyson ANG Base, TN 37777-6283.

1. STANDARD DATA.

1.1. Approval Date: 1 July 2001.

1.2. Man-hour Data Source: Operational Audit method (historical record and technical estimate techniques).

1.3. Standard Man-hour Equation: $Y = 1$ (Constant Manpower).

1.4. Points of Contact.

1.4.1. Functional: Major Daniel Steiner, ANG/204SFS

1.4.2. Manpower: Mr. Steve Griffith, ANG/XPME

2. APPLICATION INSTRUCTIONS: This work center requires constant manpower of four authorizations. No other application instructions apply.

3. STATEMENT OF CONDITIONS: The conditions listed below had no affect on the development of this standard. Minimum response rates, minimum manpower levels, standardized crew complements, safety considerations, aircraft turn-around time, length of waiting periods, levels of backlog and hours of operation.

DANIEL JAMES III, Lieutenant General, USAF
Director, Air National Guard

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 38-201, *Determining Manpower Requirements*

AFMAN) 38-208, Volume 1, *Air Force Management Engineering Program (MEP)-Processes*

AFMAN 38-208, Volume 2, *Air Force Management Engineering Program (MEP) - Quantification Tools*

Abbreviations and Acronyms

AF - Air Force

AFI - Air Force Instruction

AFSC - Air Force Specialty Codes

ANG - Air National Guard

ANGMS - Air National Guard Manpower Standard

APMP - Automated Publications Management Program

CSIR - C-4 Systems Installation Record

FMB - Financial Management Board

IAW - In Accordance With

LAN - Local Area Network

MEP - Management Engineering Program

NCC - Network Control Center

PC - Personal Computer

PMI - Periodic Maintenance Inspection

POD - Process Oriented Description

PSI - Personnel Security Investigation

TDY - Temporary duty

TMDE - Test Measurement Diagnostic Equipment

TO - Technical Order

UTA - Unit Training Assembly

Terms

Air National Guard Manpower Standard (ANGMS). A numbered, specialized publication that quantifies manpower requirements for a work center. Also includes approved variances. See AFI 38-201.

Man-hour. A unit of measuring work. It is equivalent to one person working at a normal pace for 60 minutes, two people working at a normal pace for 30 minutes, or a similar combination of people working at a normal pace for a period of time equal to 60 minutes.

Manpower Standard. The basic tool used to determine the minimum level of manpower required to support a function. It is a quantitative expression that represents a work center's man-hour requirements in response to varying levels of workload.

Staffing Pattern. Constant manpower.

Process Oriented Description. A format that shows work center responsibilities structured for easy measurement of work categories, tasks and subtasks.

Attachment 2

PROCESS ORIENTED DESCRIPTION
COMPUTER/LAN MAINTENANCE

Table A2.1. Listing of Functional Process.

1.	COMPUTER MAINTENANCE.
1.1.	MANAGES BENCH/SHOP STOCK. Ensures adequate bench stock requirement is established. Reviews bench stock listing, adjusts level, and adds or deletes item as required.
1.2.	PERFORMS EQUIPMENT AND RESOURCE MANAGEMENT.
1.2.1.	MONITORS ASSIGNED EQUIPMENT. Monitors assigned equipment for storage, security, and maintenance.
1.2.2.	MANAGES TEST MEASUREMENT DIAGNOSTIC EQUIPMENT (TMDE). Reviews Table of Allowance changes; monitors status of equipment and parts requisitioned or turned in, and coordinates with appropriate agency. Completes, maintains, and inspects documentation. Transports equipment.
1.3.	PERFORMS COMPUTER EQUIPMENT MAINTENANCE.
1.3.1.	MAINTAINS PERSONAL COMPUTER (PC).
1.3.1.1.	REVIEWS WORK ORDER. Obtains equipment work order and reviews to determine what service and/or repair work is required. Reviews/surveys work request with user to determine service and/or repair work required.
1.3.1.2.	GATHERS TOOL, MATERIAL, TEST EQUIPMENT, TECHNICAL DATA/ DOCUMENTATION, AND PREPARES WORK AREA. Obtains tool, test material, and necessary parts and material. Researches index and obtains Technical Order (TO) and/or documentation required to perform required maintenance action.

1.3.1.3.	INSTALLS/REPAIRS/MODIFIES EQUIPMENT. Isolates malfunction. Troubleshoots and diagnoses computer-related problem. Fixes hardware and software malfunction. Repairs equipment to include resetting, removing, replacing, aligning, adjusting, calibrating, lubricating, and cleaning equipment; treating corrosion; and accomplishing performance check. Performs equipment maintenance in accordance with (IAW) applicable directive, documentation, and technical data to include operational check. Restores computer system to "user friendly" status. Performs Periodic Maintenance Inspection (PMI) and operational check, as required. Includes time change, lubrication, corrosion control check, and visual inspection IAW applicable technical data. Cleans work area after maintenance action is completed. Stores/cleans tool, test equipment, technical data, etc.
1.3.1.3.1.	INSTALLS/REPAIRS/MODIFIES FACSIMILE MACHINE.
1.3.1.3.2.	INSTALLS/REPAIRS/MODIFIES COMPUTER HARDWARE. Includes central processing unit, memory, power supply, keyboard, internal/external devices, and associated software.
1.3.1.3.2.1.	INSTALLS/REPAIRS/MODIFIES COMPUTER HARDWARE.
1.3.1.3.2.2.	INSTALLS/REPAIRS/MODIFIES COMPUTER SOFTWARE IN CONJUNCTION WITH REPAIR AND SYSTEM UPGRADE.
1.3.1.3.3.	INSTALLS/REPAIRS/MODIFIES COMPUTER PERIPHERAL. Examples include, but are not limited to, printer, monitor, interface unit, modem, scanner, specialized equipment, and the flight data system.
1.3.1.4.	DOCUMENTS MAINTENANCE ACTION.
1.3.1.4.1.	COMPLETES/FILES DOCUMENTATION AND NOTIFIES CUSTOMER. Includes total time spent and repair parts used. Documents problem or maintenance action and PMI result.
1.3.1.4.2.	UPDATES/MAINTAINS DATABASE.
1.3.2.	COORDINATES AND PREPARES COMPUTER EQUIPMENT FOR CONTRACT/ WARRANTY MAINTENANCE. Prepares necessary paperwork for equipment being sent out for maintenance. Prepares malfunctioning equipment for shipment. Receives and inspects equipment after maintenance. Performs quality control assessment. Performs operational check to determine serviceability of equipment. Annotates equipment record.
1.4.	PERFORMS INSTALLATION/MAINTENANCE OF PERMANENT LAN EQUIPMENT.
1.4.1.	RECEIVES AND REVIEWS WORK REQUIREMENT.

1.4.2.	COORDINATES WITH NETWORK CONTROL CENTER (NCC) AND USER TO PREVENT EXCESSIVE DOWN TIME ON LAN.
1.4.3.	GATHERS TOOL, MATERIAL, TEST EQUIPMENT, TECHNICAL DATA/ DOCUMENTATION, AND PREPARES WORK AREA. Obtains tool, test material, necessary parts, and material. Researches index and obtains TO and/or documentation required to perform required maintenance action.
1.4.4.	INSTALLS/REPAIRS/MODIFIES LAN EQUIPMENT AND RELATED SOFTWARE TO INCLUDE OPERATIONAL CHECK AND DOCUMENTING ACTION TAKEN. Cleans work area after maintenance action is completed. Stores/cleans tool, test equipment, technical data, etc.
1.4.5.	DOCUMENTS MAINTENANCE ACTION.
1.4.5.1.	COMPLETES/FILES DOCUMENTATION AND NOTIFIES CUSTOMER. Includes total time spent and repair parts used. Documents problem or maintenance action. Updates C-4 Systems Installation Record (CSIR).
1.4.5.2.	UPDATES/MAINTAINS DATABASE.
1.5.	PROVIDES GUIDANCE/TECHNICAL REVIEW. Provides technical guidance and reviews AF IMT 3215, *IT/NSS Requirements Document*.
1.6.	PERFORMS EQUIPMENT PARTS ACQUISITION. Researches and orders part associated with equipment preventive maintenance, equipment repair, equipment modification, and minor equipment installation/removal.
2.	NETWORK MANAGEMENT.
2.1.	ANALYZES/OPTIMIZES NETWORK TRAFFIC.
2.2.	ANALYZES/OPTIMIZES NETWORK BACKBONE. Examples include, but are not limited to, routers, hubs, switches, and concentrators.
2.2.1.	UTILIZES DIAGNOSTIC TOOL; E.G., PROTOCOL ANALYZER AND SNIFFER.
2.2.2.	RECONFIGURES EQUIPMENT OR MODE OF OPERATION.
2.2.3.	COORDINATES REPLACEMENT OF EQUIPMENT.
2.2.4.	UPGRADES OR LOADS SOFTWARE PATCH AND RELEASE.
2.2.5.	CREATES AND MAINTAINS HISTORICAL DATA TO ESTABLISH BASELINE.

2.2.6.	CONTACTS VENDOR FOR TECHNICAL SUPPORT ON PROBLEM RESOLUTION OR EQUIPMENT TROUBLESHOOTING.
2.3.	MANAGES/MAINTAINS NETWORK SERVER. This includes all servers and systems controlled by the NCC.
2.3.1.	INSTALLS, MAINTAINS, AND UPDATES NETWORK OPERATING SYSTEM/APPLICATION SOFTWARE.
2.3.2.	IDENTIFIES, TROUBLESHOOTS, AND RESOLVES SERVER PERFORMANCE.
2.3.3.	RESEARCHES AND IMPLEMENTS SERVER ENHANCEMENT.
2.3.4.	PERFORMS BACK-UP AND RECOVERY.
2.3.4.1.	BACKS-UP SERVER.
2.3.4.2.	RESTORES FILE FROM BACK-UP SOURCE.
2.3.4.3.	MAINTAINS BACK-UP IN SECURE ENVIRONMENT IN CASE OF CATASTROPHIC LOSS OF SYSTEM.
2.3.5.	MAINTAINS SYSTEM AT OPTIMUM PERFORMANCE.
2.3.5.1.	UTILIZES DIAGNOSTIC TOOL AND SERVER STATISTIC.
2.3.5.2.	TAKES CORRECTIVE ACTION BASED ON DIAGNOSTIC ANALYSIS. Balances disk usage, balances load between servers, and optimizes traffic between servers.
2.3.6.	UPGRADES OR LOADS SOFTWARE PATCH AND RELEASE.
2.3.7.	PERFORMS OPERATING SYSTEM MAINTENANCE; E.G., SERVER SHUTDOWN AND RESTART.
2.4.	TRACKS JOB ORDER.
2.4.1.	MAINTAINS SOFTWARE PROGRAM TO TRACK JOB ORDER. Inputs data and generates report.
2.4.2.	PROVIDES ON-THE-SPOT TECHNICAL ASSISTANCE. Assists and attempts to solve problem prior to scheduling job in the work order program.
2.5.	MAINTAINS TECHNICAL DATA. Receives and posts data and changes to file. Maintains file for serviceability.

2.6.	PERFORMS END-USER PERSONAL COMPUTER SUPPORT.
2.6.1.	INSTALLS AND MAINTAINS DESKTOP SOFTWARE AND HARDWARE CONFIGURATION.
2.6.2.	RESTORES USER APPLICATION FILE.
2.6.3.	RESPONDS TO END-USER PROBLEM. Identifies, troubleshoots, and resolves problem.
2.6.4.	REPORTS SECURITY BREACH.
2.6.5.	UPCHANNELS UNRESOLVED PROBLEM.
3.	TEMPORARY DUTY (TDY) TRAVEL. Performs TDY travel to perform official job-oriented duty.
4.	UNIT TRAINING ASSEMBLY (UTA). Performs planning and scheduling task associated with preparation for UTA.
5.	INDIRECT. Indirect work involves those tasks that are not readily identifiable with the work center's specific product or service. The major categories of standard indirect work are: Administers Civilian, Officer, and Enlisted Personnel; Directs Work Center Activity; Provides Administrative Support; Prepares for and Conducts/Attends Meeting; Administers Training; Manages Supplies; Maintains Equipment; and Performs Cleanup.

Attachment 3

MANPOWER TABLE

Table A3.1. Standard Manpower Table.

Work Center	Air Force Specialty Title	AFSC	Manpower Requirement							
Security Forces Computer Lan Maintenance	Communications-Computer Systems Operations	3C0XX	1							
Total			1							

 Note. AFSCs may be adjusted at the discretion of the Commander.